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Invention: Device for supporting of a tensioning device in a wall- to- wall carpet.

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Device for supporting of a tensioning device in a wall- to- wall carpet.

The Invention relates to a device for supporting a tensioning device in a wall-to-wall carpet for the purpose of adaptation of patterns present in sideways joining carpet tracks to form a uniform pattern picture. Carpet floors are installed in different ways, one of these methods is an installation not adhesively attached to the floor and a tensioning of the carpet by attachment on nail strips running along the walls of the room. Such carpets to be installed are delivered in rolls having a width of four meters and having a rolled up length of frequently 10 meters. If the carpets contained patterns, then attention has to be placed that a uniform pattern picture results over the complete surface in case of carpet tracks adjoining to each other, that is no sideways shifting of the pattern can be recognized. In case of a standard size room, a carpet track can be shifted with the aid of a device for the purpose of precise adaptation of the pattern, wherein a plate furnished on the bottom side with many nails for engagement into the carpet track is shifted with a toggle joint mechanism and one rod supported against an oppositely disposed wall up to the reaching of the desired pattern picture. In case of the room being very large, then this method cannot any longer be applied, since a very long rod cannot be handled any longer or, respectively, would not be available for use.

Therefore it was an object of the present invention to employ the recited method for the adaptation of carpet patterns also in very large rooms. The subject concerned comprises so to speak to create a counter support in the middle of the room instead of employing a wall of a room as a support, wherein a connection rod for the nail plate shiftable by way of a toggle joint mechanism can be supported at the counter support.

An embodiment of the subject of the invention is illustrated in more detail in the following by way of the drawings.

There is shown in:

Figure 1 a top perspective view of the device.

Figure 2 a bottom perspective view of the device.

Figure 3 an enlarged to detail section of the device from the bottom side and showing the year racks but without plate, and

Figure 4 a top perspective view of the device in cooperation with a shift plate.

The device exhibits a preferably rectangular flat plate 1, wherein the flat plate 1 exhibits two oval holes 2 in the middle located nearly to oppositely disposed longitudinal edges for the purpose of gripping through for supporting and carrying of the relatively heavy plate 1. The remaining face of the plate 1 is furnished with a plurality of strips 3 at the two sides of these holes 2, wherein the strips 3 are disposed to the left and to the right of the two holes 2, in each case parallel to each other, however at an angle of about 80 degrees relative to the plate longitudinal edge, that is inclined over the plate bottom side running and in fact on the one side of the holes 2 in a mirror image to the strips 3 on the other side of the plate 1. A plurality of nails 4 forming a row are disposed in each strip 3, wherein the nails 4 are not disposed perpendicular, but all nails are inclined to the same side, in order to be impressed somewhat inclined into the carpet floor up to the under weaving of the carpet floor, wherein the direction of the inclination of the nails 4 is directed in the same direction, into which the pressure becomes effective, which pressure is generated upon actuation of the tensioning device onto the plate 1.

The nails 4 are disposed in the strips such that their sharp tips protrude from the strip and can engage with the carpet.

The inclined arrangement of the strips 3 with the nails 4 on the bottom side of the plate 1 has the purpose that the nails 4 engage into the carpet not along a straight line but staggered relative to each other, in order to protect and treat with care the structure of the carpet.

A gear rack 5 with rounded teeth is disposed at one longitudinal edge of the plate 1, wherein in the bottom side nails 4 are inclined directed relative to the plate 1, wherein a counter support head piece 6 cooperates with the said gear rack 5 and exhibits the same tool profile at the side as has the gear rack 5.

Preferably, the counter support head piece 6 cooperates with the said gear rack 5 and exhibits a tool profile at the side matching to the contour of the gear rack 5.

A tube piece 7 is swivelable hinged at the counter support head piece 6, wherein the tube piece 7 serves for receiving a connection rod a to the shift plate 9 and is separated from the device. The counter support 6/7 can be moved to very easily by hand away from the gear rack 5 and can slide or shift along the gear rack 5 and can again engage with the gear rack 5 in order to position the counter support 6/7 at any arbitrary position along the plate 1, wherever the counter support 7 is required just at the moment for a correction motion of the carpet floor for the purpose of balancing and adaptation of patterns in the carpet.

The connection rod 8 extends immediately above the surface of the plate 1 and the connection rod 8 maintains thereby the plate 1 down on the carpet floor. A hypothetical connection rod not engaging at the rear plate longitudinal edge but engaging at the front plate longitudinal edge would press upwardly the plate 1 based on the large pressure force upon actuation of the toggle joint mechanism 13 for shifting of the carpet track.

The plate 1 itself with the plurality of strips is relatively heavy, but the plate 1 should be conveniently movable on the carpet floor. For this purpose, rollers 10 are furnished at the four plate corners, wherein in each case two of the rollers 10 are connected by an axle 11 at the narrow side of the plate 1, and wherein the rollers 10 therefore can be swiveled by 90 degrees with the aid of a lever 12 from the counter sunk position, in order to be able to move then the plate 1. The device has the purpose to form a support device upon installation of carpet floors within a large room, which function is assumed otherwise by a room wall in smaller rooms, in order to support at this support device the similarly with strips of nails furnished shift plate 9, which shift plate 9 is moved by way of a toggle joint mechanism 13, in order to reach the adaptation of the carpet pattern present in all carpet tracks by slight stretching or, respectively shifting of the carpet track, whereupon then the length of the carpet is fixed with the nail strips present along the walls of the room.